

Advanced Algebra
 Graph and Characteristics of Polynomials
****Graph Scales GIVEN****

Name: _____

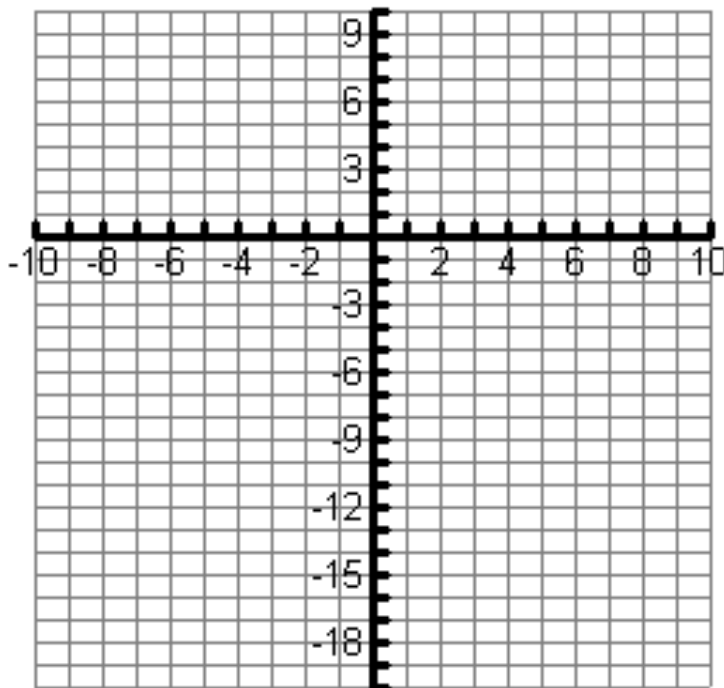
Worksheet A

Factor & solve the polynomials on a separate piece of paper. Describe all the characteristics of each polynomial. Sketch each of the graphs and label vertices.

1. $f(x) = x^3 - 5x^2 - x + 5$

- Domain: _____
- Range: _____
- Zeros: _____
- x-int: _____
- y-int: _____
- end behavior:

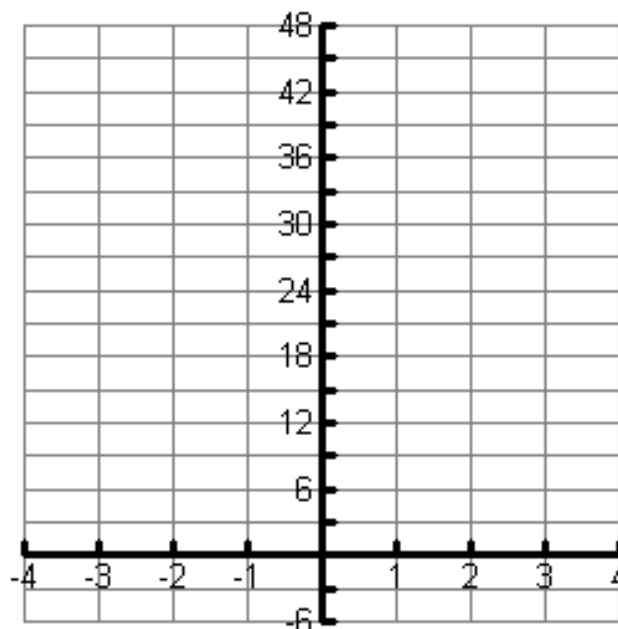
- Maximums: global: _____
Local: _____
- Minimums: global: _____
Local: _____
- Intervals: increasing: _____
decreasing: _____



2. $f(x) = x^4 - 13x^2 + 40$

- Domain: _____
- Range: _____
- Zeros: _____
- x-int: _____
- y-int: _____
- end behavior:

- Maximums: global: _____
Local: _____
- Minimums: global: _____
Local: _____
- Intervals: increasing: _____
decreasing: _____



3. $f(x) = 4x^3 - x^2 - 4x + 1$

Domain: _____

Range: _____

Zeros: _____

x-int: _____

y-int: _____

end behavior:

Maximums: global: _____

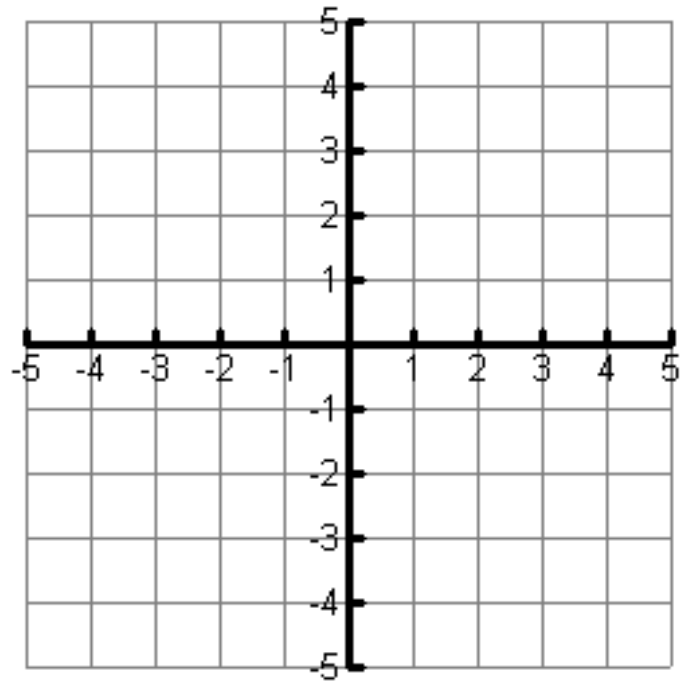
Local: _____

Minimums: global: _____

Local: _____

Intervals: increasing: _____

decreasing: _____



4. $f(x) = 5x^2 + 29x + 20$

Domain: _____

Range: _____

Zeros: _____

x-int: _____

y-int: _____

end behavior:

Maximums: global: _____

Local: _____

Minimums: global: _____

Local: _____

Intervals: increasing: _____

decreasing: _____

